



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,857	05/07/2007	Sang Ryul Lee	HI-0275	3908
34610	7590	10/23/2009	EXAMINER	
KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200			ROBINSON, DANIEL LEON	
ART UNIT	PAPER NUMBER			
	3742			
MAIL DATE	DELIVERY MODE			
10/23/2009	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,857	Applicant(s) LEE, SANG RYUL
	Examiner DANIEL L. ROBINSON	Art Unit 3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 April 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1-15-2008

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application
6) Other: _____

Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osepchuk(U.S.Pat.4,421,968) in view of Jun(U.S.Pat.5,919,391) and Boulard(U.S.Pat.4,751,357). Osepchuk disclose a microwave oven as claimed with a magnetron, a cavity, a stirrer, screws a waveguide, and elevated portions. but does not explicitly show a discloses a concave portion or a screw covering. Jun discloses a microwave oven as claimed comprising a magnetron, a wave-guide and a cooking cavity, characterized in that second and third side walls have at least one concave portion for distributing microwave energy, and also shows the oven uniformly penetrates microwave energy into foodstuffs in vertical and horizontal directions, thereby effectively heating the foodstuffs.

Claims 15, 16, 18 and 20 relate to a microwave oven comprising a cooking cavity, a wave-guide, a stirrer fan and a plate having forming parts, characterized in that the oven uniformly and rapidly penetrates microwave into foodstuffs, thereby efficiently heating the foodstuffs. It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use the concave portion as taught by Jun with the device of

Osepchuk so as to effectively distribute the microwave energy. Boulard discloses a microwave oven with moving equipment and an accessory for the oven that shows a screw with a cover figure 1. It would have been obvious to one of ordinary skill in the art at the time of the claimed to use a covered screw as taught by Boulard with the device of Osepchuk so as to fasten a shaft of the screw.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL L. ROBINSON whose telephone number is (571)272-4788. The examiner can normally be reached on m-f 5:30-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/575,857
Art Unit: 3742

Page 4

Dir

/Daniel L Robinson/
Primary Examiner, Art Unit 3742